

# UC-ENGINE-SD

## UC Engine for Microsoft Teams® Collaborative Software



- Sold exclusively as part of a complete Crestron Flex UC system
- Enables Microsoft Teams® software video conferencing and content sharing
- Employs a powerful Intel® NUC Mini PC
- Preloaded Microsoft® and Crestron® software
- Easy to provision and manage through the Crestron XiO Cloud™ service
- Works natively with any Microsoft Teams or Skype® for Business software account
- Connects and communicates securely over any enterprise or SMB network
- Supports a single display configuration
- External 100-240V power adapter included

All the capabilities of a complete Microsoft Teams® software based video conferencing and content sharing solution are empowered by the Crestron® UC Engine (UC-ENGINE-SD). For ultimate performance, Crestron employs a powerful Intel® NUC Mini PC running Microsoft® software with built-in Crestron XiO Cloud™ support.<sup>2</sup> The UC Engine forms the core of a complete Microsoft Teams based Crestron Flex system, providing extreme processing performance, Gigabit Ethernet, and complete connectivity for one HD display, a USB camera, and one USB audio conferencing device.<sup>1</sup>

A maximum of two [touch screens](#) or one touch screen and one [Crestron Mercury®](#) UC conference console may be added for room control.

Presenting and sharing AV content from a laptop PC is facilitated through the addition of a Crestron HDMI® to USB 3.0 Converter (HD-CONV-USB-200), which enables full-motion HD video and audio content ingest via a single HDMI input. As part of a complete Crestron Flex system, the UC-ENGINE-SD and HD-CONV-USB-200 are mounted together on a bracket (UC-BRKT-100-SD-ASSY), which allows for easy installation attached to a wall or to the back of the display device.<sup>1</sup>

This product is sold exclusively as part of a complete [Crestron Flex](#) system kit:

- Refer to the Crestron Flex M130-T system (UC-M130-T) for a complete tabletop video conferencing solution featuring the UC Engine and Crestron Mercury® audio conference console.

- Refer to the Crestron Flex B130-T or B140-T system (UC-B130-T or UC-B140-T) for a complete wall mount video conferencing solution featuring the UC Engine, UC video conference smart soundbar, and tabletop touch screen.

### Specifications

#### Intel NUC Mini PC

**Model:** Intel NUC Kit NUC8i5BEK

**Processor:** Intel Core® i5-8259U processor (2.3 GHz with 3.8GHz Turbo, Quad Core, Hyper-thread, 6 MB Cache, 28W TDP)

**RAM:** 8 GB, DDR4-2400 1.2V SO-DIMM

**Storage:** 128 GB

**Graphics:** Intel Iris® Plus Graphics 655

**Networking:** Intel Ethernet Connection I219-V, Intel Wireless-AC 9560 + Bluetooth® 5.0

**Operating System:** Windows® 10 IOT Enterprise<sup>2</sup>

**UC Client:** Microsoft Teams or Skype for Business software

**Management Client:** Crestron XiO Cloud™ service

#### Communications

**Ethernet:** 10/100/1000 Mbps

**UC:** Microsoft Teams or Skype for Business client; compatible with Office 365® cloud service or on-premises Skype for Business Server 2015 (or above); supports Teams and SfB video conferencing, Enterprise Voice, Phone System, O365 modern authentication (limited), directory lookup, and PSTN calling; DTMF tone generation (RFC 2833 & in-band), acoustic echo cancellation, automatic gain control, comfort noise generator, low-delay audio packet transmission, adaptive jitter buffers, packet loss concealment

**USB:** Four USB 3.0 host ports supporting USB HID, UAC, and UVC for audio conferencing device, camera, and content ingest (plus temporary keyboard/mouse for initial setup)<sup>1</sup>

#### Video

**Camera Input:** USB UVC from a Microsoft Teams compliant USB camera<sup>1</sup>

**Content Input:** USB UVC content ingest from a Microsoft Teams compliant HDMI to USB converter<sup>1</sup>

**Display Output:** DisplayPort™ 1.2 via USB Type-C® port, converted to HDMI via converter cable<sup>1</sup>

**Camera Input Resolution:** HD 1080p @ 30 fps

**Content Input Resolution:** HD 1080p @ 60 fps

**Display Output Resolution(s):** HD 1080p @ 60 fps

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### Audio

**Audio Conferencing Input/Output:** USB UAC bidirectional stereo audio signals for integration with a Microsoft Teams software compliant AEC-enabled USB audio conferencing speakerphone device<sup>1</sup>

**Content Input:** USB UAC stereo audio ingest from a Microsoft Teams compliant HDMI to USB convertor<sup>1</sup>

### Buttons & Indicators

**Power:** (1) Pushbutton with LED backlight for power on/off and reset

**LAN:** (2) LEDs on LAN port for Ethernet link status and activity

### Connectors

**SD Card Slot:** (1) SDXC memory card slot with UHS-I support (not used)

**SSUSB (Front):** (2) USB 3.0 Type-A connectors, female; USB 3.0 host ports (one charging, one non-charging); Connect to a keyboard and mouse for setup, and to an audio conferencing device for runtime operation<sup>1</sup>

**Headset (Front):** (1) 3.5 mm headphone/microphone jack (not used)

**19 VDC:** 19 VDC power input

**LAN:** (1) 8-pin RJ45 connector, female; 10Base-T/100Base-TX/1000Base-T Ethernet port

**SSUSB (Rear):** (2) USB 3.0 Type-A connectors, female; USB 3.0 host ports

**USB-C:** (1) USB Type-C connector, female; Digital video output; Connects to the display device via a USB-C® to HDMI converter cable<sup>1</sup>

**HDMI:** (1) HDMI Type A connector, female; Digital video output (disabled); Requires connection to an EDID emulator (UC-CONN-HD)<sup>1</sup>

### Power

**Power Adapter (included):** Input: 100-240 VAC, 50/60 Hz; Output: 90 W @ 19 VDC

### Construction

**Enclosure:** Metal and plastic, processor controlled fan cooled

### Environmental

**Operational Temperature:** 32° to 104° F (0° to 40° C)

**Storage Temperature:** -4° to 140° F (-20° to 60° C)

### Dimensions

**Height:** 4.60 in. (116.84 mm)

**Width:** 4.40 in. (111.76 mm)

**Depth:** 1.41 in. (35.81 mm)

### Compliance

**Product Safety:** IEC 60950-1, UL 60950-1, EN 60950-1, CAN/CSA-C22.2 No. 60950-1

**EMI/RF (Class B):** CISPR 32; FCC CFR Title 47, Chapter I, Part 15, Subparts B, C, E; ICES-003, EN 55032, EN 55024, ETSI EN 300 328, ETSI EN 301 489-1, ETSI EN 301 489-17, ETSI EN 301 893, EN 62311, AS/NZS 2772.2, AS/NZS 4268; VCCI V-2, V-3, V-4, KN-32, KN-24, CNS 13438

**Environmental:** RoHS Directive 2011/65/EU, WEEE Directive 2012/19/EU, China RoHS - Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products

Notes:

- Audio conferencing devices (Crestron Mercury, Crestron Avia™ DSP, or UC sound bar) are either sold separately or as part of a complete Crestron Flex system kit. The UC engine, bracket, convertors, EDID emulator, camera, keyboard, and cables, are all sold exclusively as part of a complete Crestron Flex system kit. The display devices are not included.
- Custom OS images are not supported.

This product is sold only as part of a complete system kit, which may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <https://www.crestron.com/How-To-Buy/Find-a-Representative> or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty for 3 years. Refer to <https://www.crestron.com/warranty> for full details.

The specific patents that cover Crestron products are listed online at [www.crestron.com/legal/patents](http://www.crestron.com/legal/patents).

Certain Crestron products contain open source software. For specific information, visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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